REMARKS

Responsive to the Office Action, Applicants propose a drawing correction to show reference numeral 10 in Figure 3. The elongated sinker bar 10 is not believed to show in the side elevation of Figure 4 since the hydraulic actuator piston rod 62 is positioned in front of the sinker bar 10. Subject to the Examiner's approval of the drawing correction, formal drawings will be submitted, including the correction noted above, when required.

Applicants acknowledge with appreciation the allowance of Claims 7 through 18 and the indication of allowability of Claim 3.

Claim 3 has been canceled and Claims 1, 2, 4, 5 and 6 remain in the application with Claim 1 being amended to include the recitation of Claim 3 and Claims 2 and 6 being amended to properly depend from amended Claim 1. Claims 1, 2, 4, 5 and 6 are believed to be in condition for allowance.

Applicants submit with this amendment new Claim 19 in independent form and based substantially on the overall combination of features recited in original Claims 1, 2, 4 and 6 and with additional recitation regarding the requirement that the polymer sleeve is seamless and has a cylindrical exterior surface for engagement with the interior surface of a cylindrical well tubing. This requirement of Claim 19 together with the requirement that the sleeve is formed of a wear resistant polymer material having a coefficient of friction with respect to the well tubing which is less than the coefficient of friction of the material of the pump rod and further wherein the sleeve has a coefficient of thermal expansion which is substantially the same as the coefficient of thermal expansion of alloy steel, is believed to render Claim 19 patentably distinct.

In the Office Action, the Examiner rejected Claims 1, 2 and 4 through 6 under 35 U.S.C. 102(b) or 103(a) over U.S. Patent 5,339,986 to Hart et al. The Hart et al reference discloses a field installable rod guide for a well sucker rod

which includes a spool member (25) having a tubular sleeve portion (24) over which a guide body (22) is disposed, the guide body having radially projecting ribs (48, 50 and 52) which are engageable with the well tubing 14 for centralizing the sucker rod in the tubing. However, the Hart et al reference does not suggest providing a tubular sleeve, having a cylindrical exterior surface for engagement with the interior surface of a cylindrical well tubing, which is a seamless member having an inner diameter in a relaxed condition slightly less than the outer diameter of the rod section to which it is secured and further formed of a material having the coefficient of friction and coefficient of thermal expansion properties set forth in Claim 19. Accordingly, by providing a tubular sleeve of a material having the requirements set forth in Claim 19, a less complicated and more efficient wear sleeve is provided for the sinker bar or pump rod set forth in the claim and Claim 19 is not believed to be anticipated by or made obvious by the Hart et al reference as well as the other art of record. Accordingly, consideration for allowance of Claim 19 is respectfully requested.

Applicants have made a diligent effort to advance the prosecution of this application by placing allowable claims in proper form for allowance and by pointing out with particularity herein how new Claim 19 is believed to be patentably distinct. An early Notice of Allowance of Claims 1, 2 and 4 through 19 is respectfully solicited.

Marked up versions of Claims 1, 2, and 6 are as follows.

1. (Amended) An elongated pump rod for use in a pump rod string for a downhole well pump, said pump rod including a generally cylindrical rod section extending over a major portion of the length of said pump rod, said pump rod including means formed thereon for coupling said pump rod to said pump rod string, and an elongated sleeve extending over said cylindrical rod section and secured in engagement therewith, said sleeve being formed of a wear resistant polymer material comprising one of high density polyethylene and ultra high density polyethylene.

2. (Amended) The pump rod set forth in Claim 1 wherein:

[said sleeve is formed of a polymer material having a] the coefficient of friction of said sleeve with respect to a well tubing in which said pump rod is disposed [which] is less than the material of said pump rod.

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6. (Amended) The pump rod set forth in Claim 1 wherein: [said sleeve is formed of a material having a] the coefficient of thermal expansion [which] of said sleeve is substantially the same as the coefficient of thermal expansion of alloy steel.

Respectfully submitted,

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